

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 2004/001422

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H04B 7/005, H04L 12/56  
According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H04B, H04Q, H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 03058988 A1 (NOKIA CORPORATION), 17 July 2003 (17.07.2003), page 5, line 11 - page 7, line 2 --	1-10
A	US 20030125068 A1 (Y.J.LEE ET AL), 3 July 2003 (03.07.2003), paragraphs[0009-0025] --	1-10
A	EP 1351411 A1 (LUCENT TECHNOLOGIES INC.), 8 October 2003 (08.10.2003), paragraph [0012] --	1-10

☒ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"B" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 26 April 2005	Date of mailing of the international search report 04-05-2005
Name and mailing address of the ISA/ Swedish Patent Office Box 5055, S-102 42 STOCKHOLM Facsimile No. +46 8 666 02 86	Authorized officer Fredrik Blomqvist /itw Telephone No. +46 8 782 25 00

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>"Link and system performance aspects of proportional fair scheduling in wcdma/hsdpa." Pub: Vehicular Technology Conference, 2003. VTC 2003-Fall. IEEE 58 th Orlando, FL, USA. 6-9 OCT. 2003, Piscataway, NJ, USA, IEEE, US Conference Proceedings Article abstract</p> <p style="text-align: center;">-- -----</p>	1-10

# INTERNATIONAL SEARCH REPORT

Int. Application No.  
SE 2004/001422

## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☐ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see extra sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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Inter application No.  
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Box III

Continuation of Box III:

The following separate inventions were identified:

I: Claims 1-3 is directed to a method for a transmission unit for transmitting packet data where data is scheduled and the power level of the signalling and control channel is regulated during a transmission interval taking account of shared packet data channel power level.

II: Claims 4-10 is directed to a method and transmission unit for scheduling and transmitting data packets to user entities where the scheduling is done within the limits defined of a possible and permitted power.

The present application has been considered to contain 2 inventions which are not linked such that they form a single general inventive concept, as required by Rule 13 PCT for the following reasons:

Claim 1-3 relates to the problem of interference effects in connection with transmissions on a control channel and a shared packet data channel. This problem appears to be solved by transmitting packet data where the power level of the signalling and control channel is regulated during a transmission interval taking account of shared packet data channel power level.

Claim 4-10 relates to the problem of packet data transmissions interfering with at least a prioritized dedicated channel for which a transmit power loop regulation imposes restrictions, while optimizing throughput. This problem is solved by scheduling and transmitting data packets to user entities where the scheduling is done within the limits defined of a possible and permitted power.

The present application has been considered to contain 2 inventions which are not linked such that they form a single general inventive concept, as required by Rule 13 PCT for the following reasons:

.../...

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Box III

The single general concept of the present application is the teaching that scheduling is used in a power control system.

Document US 20030125068 A1 discloses a method of performing power control in a system where high-speed data is scheduled.

Thus, the single general concept is known and cannot be considered as a single general inventive concept in the sense of Rule 13.1 PCT.

No other features can be distinguished which can be considered as same or corresponding special technical features in the sense of Rule 13.2 PCT.

Thus, the application lacks unity of invention.

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WO	03058988	A1	17/07/2003	AU	2003201049	A	00/00/0000
				EP	1464191	A	06/10/2004
				US	20030153323	A	14/08/2003

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US	20030125068	A1	03/07/2003	NONE			
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EP	1351411	A1	08/10/2003	DE	60300227	D	00/00/0000
				JP	2003318821	A	07/11/2003
				US	20040203980	A	14/10/2004

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